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Barbara Wilson

AFRL welcomes new chief technologist on board

by 2nd Lt. Morgan J. O'Brien III, AFRL Public Affairs

WRIGHT-PATTERSON AFB, Ohio — The Air Force Research Laboratory, headquartered at Wright Patterson Air Force Base, recently brought on board a chief technologist, Dr. Barbara Wilson. In this new position of chief technologist, Wilson is the primary advisor on science and technology (S&T) and primary authority for the technical content and quality of the S&T portfolio to the AFRL commander.

"Dr. Wilson joins us from NASA's Jet Propulsion Laboratory (JPL) under the Intergovernmental Personnel Act (IPA)," said Maj Gen Paul Nielsen AFRL commander. "I am excited to see the tremendous motivation, insight, and down-to-earth approach she brings to the post."

The relocation to Dayton marks another return for Wilson to Ohio. Since her father's position as a chemist for Cincinnati-based Proctor and Gamble required frequent moves, Wilson volleyed from Cincinnati to England back to Cincinnati to Germany back to Cincinnati. Despite the constant uprooting, there were advantages to all the moves.

Due to her European schooling, Wilson graduated high school at the age of 15. As she turned 16, she began her freshman year at Mount Holyoke College in Massachusetts. Initially, Dr. Wilson studied chemistry, but soon physics grabbed her attention.

"The aspect of Physics I most enjoy is that it relies more on understanding than on memorization, and that it describes the underlying processes going on in everything around us."

Upon graduation from Holyoke, Dr. Wilson embarked on a 10-year graduate school odyssey that brought her within six months of a Ph.D. in High Energy Theory, and eventually earned her a Ph.D. in Solid State Experimental Physics.

"As I closed in on the first Ph.D., I decided it wasn't for me," Wilson said. "I preferred a career field where I could interact with people and one in which I could explain the things I was working on to non-specialists. I was willing to undertake ten years of graduate study in order to work in a field I enjoyed — and I've never regretted that decision."

Upon receiving her doctorate from Wisconsin, Dr. Wilson worked for AT&T's Bell Labs. From Bell, Wilson moved to JPL in 1998. At JPL, Wilson rose from technical group supervisor in the Microdevices Section through the ranks to become JPL's Chief Technologist. While there, Wilson won the prestigious NASA Special Achievement Medal for her contributions to the New Millennium Program.

Wilson was originally asked to serve as a member of the rating/ranking panel charged with finding AFRL's Chief Technologist, but decided to withdraw from the panel, and compete for the position, herself.

"I was interested in working at AFRL for many reasons," said Wilson. "I have enjoyed my previous experiences with the Air Force, and looked forward to a broader exposure to the people and research areas across the lab that comes as part of taking a position such as Chief Technologist."

"Dr. Wilson's appointment acknowledges her exceptional executive leadership ability," Nielsen said, "The position calls for her to analyze and integrate multiple complex technical programs and motivate a diverse collection of professional scientists and engineers."

To achieve the challenging tasks in front of her, Wilson expects to rely primarily on management by consensus. "I plan to take advantage of all the incredible brainpower our lab has," Wilson said. "I'll be seeking new ideas from individuals, stimulating the group to expand on and integrate these ideas, and building consensus for optimal corporate approaches to the technical challenges faced by the Air Force."

Wilson characterizes herself as a high-energy person with an informal style, exemplified by the tennis shoes she wears to the office. Wilson plans to use her energy and leadership to sustain AFRL's growth, and further improve the overall quality of the tech program.

continued on page 2

continued from page 1

“When the Air Force brought the various laboratories together in 1997, it was a major step in the right direction,” Wilson said. “I want to keep pushing towards an integrated organization, and I am certain the rest of the laboratory does too. Through my experiences as a leader I learned a key rule to follow: ‘If something is worth doing, it’s worth doing well.’”

One of Wilson’s top priorities focuses on expanding the interface with the external community. She hopes to stimulate further collaboration with university and commercial researchers, and enhance AFRL’s presence within all parts of the community.

Wilson’s Air Force resume boasts a broad range of involvement. She has twice served on the Air Force Scientific Advisory Board (SAB). Her SAB experiences include participation in three Summer Studies, including New World Vistas and the 2001 study on Technologies for Detecting Difficult Targets, in which she co-chaired the Urban Targets Panel.

Through her experiences at JPL, she considers herself a specialist in Space Technology, and brings some philosophy from that arena to her role as AFRL Chief Technologist. “History shows us that societies that don’t explore beyond their current frontiers tend to stagnate and lose their vitality. This is an understandable outcome of evolution, as species that can only survive in a single niche are inherently more vulnerable to extinction. Similarly, to sustain a vital culture in the lab we must encourage our staff to explore beyond current technical boundaries,” Wilson asserts. @

